Technics

Stereo Integrated Amplifier

SU-V65A

OPERATING INSTRUCTIONS

- These instructions also apply to units of different color.

Notes:

- Specifications differ according to the area code.
- The "EK" area code, for example, indicates United Kingdom specifications.
- The "EK" indication is shown on the packing case and serial number tag.

Before operating this unit, please read these instructions completely.

Dear Stereo Fan

We want to thank you for selecting this product and to welcome you to the growing family of satisfied Technics product owners around the world. We feel certain you will get maximum enjoyment from this new addition to your home.

Please read these operating instructions carefully, and be sure to keep them handy for convenient reference.

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Accessory

●Feet (see below)	2
●AC power supply cord (see page 5)	1

Before Use

Be sure to disconnect the mains cord before adjusting the voltage selector.

Use a minus (−) screwdriver to set the voltage selector (on the bottom panel) to the voltage setting for the area in which the unit will be used.

(If the power supply in your area is 117 V or 120 V, set to the "127 V" position.)

Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries; the correct voltage is already set.)

For United Kingdom ("EK" area code model only)

The "EK" indication is shown on the name plate.

Important

THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE:	NEUTRAL
BROWN:	LIVE

As the colours of the wires in the mains lead of this unit may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows. The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

This apparatus was produced to BS 800:1983

Placement Hints

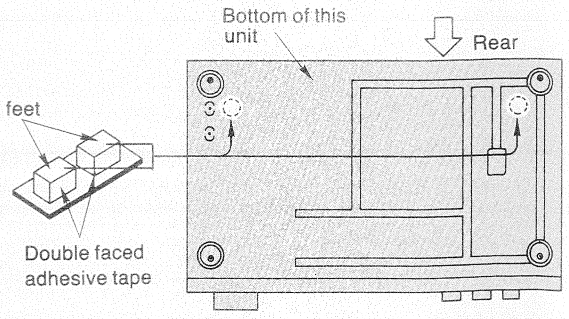
■ Placement on top of other equipment

To accommodate equipment of different depths, use the additional feet (included) to support this unit.

Disconnect the unit from AC mains before attempting this procedure.

Note:

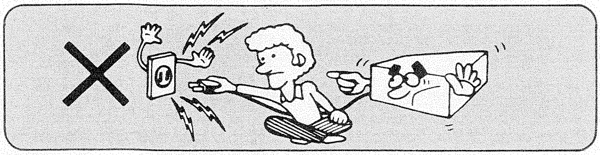
Before applying the feet, wipe the bottom surface of this unit with cloth to remove any dirt.



Suggestions for Safety

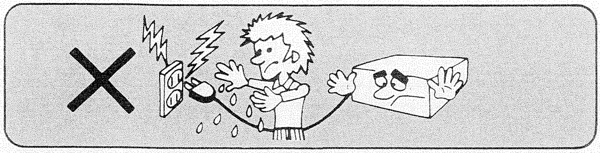
■ Use a standard electrical AC wall outlet

1. **Use from an AC power source of high voltage, such as for air conditioners, is very dangerous.**
   Be extremely careful not to make a connection to the electrical outlet for a large air conditioner or central-heating unit which uses high voltage, because there is the possibility of fire.
2. **A DC power source cannot be used.**
   Be sure to check the power source carefully, especially on a ship or other place where DC is used.



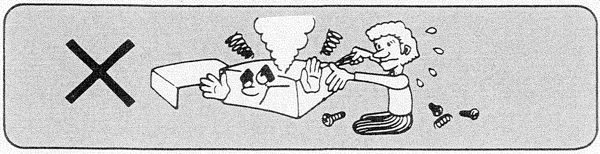
■ Connection and removal of the power cord plug

1. **Wet hands are dangerous.**
   A dangerous electric shock may result if the plug is touched by wet hands.
2. **Don't pull the power cord.**
   Always grasp the plug; never pull the cord itself.



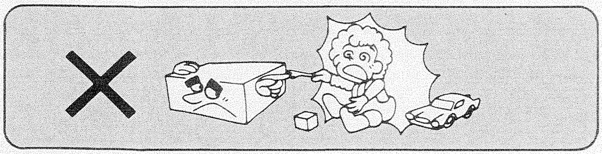
■ Never attempt to repair or reconstruct this unit

A serious electric shock might occur if this unit is repaired, disassembled or reconstructed by unauthorized persons, or if the internal parts are accidently touched.



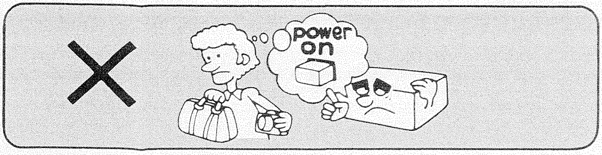
■ For families with children

Never permit children to put anything, especially metal, inside this unit. A serious electric shock or malfunction could occur if articles such as coins, needles, screwdrivers, etc. are inserted through the ventilation holes, etc. of this unit.



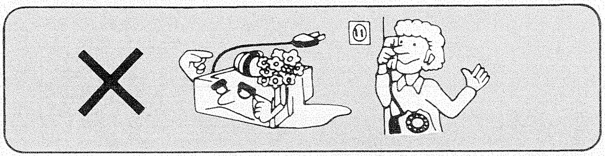
■ Turn off after use

If the unit is left for a long time with the power on, this will not only shorten its useful operation life, but may also cause other unexpected trouble.



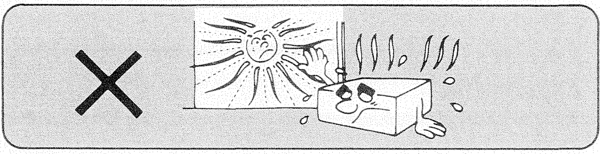
■ If water is spilled on the unit

Be extremely careful if water is spilled on the unit, because a fire or serious electric shock might occur. Immediately disconnect the power cord plug, and consult with your dealer.



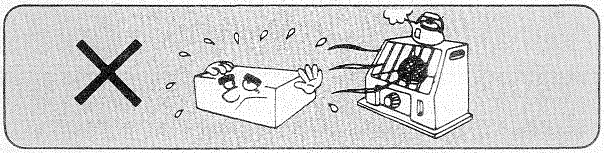
■ Place the unit where it will be well ventilated, and away from direct sunlight

Place this unit at least 10 cm (4") away from wall surfaces, etc., and away from direct sunlight. Be careful that curtains and similar materials do not obstruct the ventilation holes.



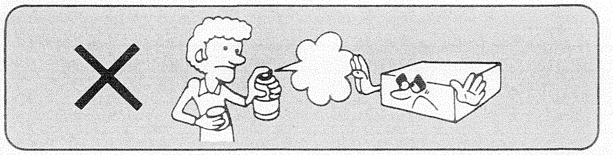
■ Keep the unit away from heaters, etc.

Heat can damage the external surfaces as well as internal circuits and components.



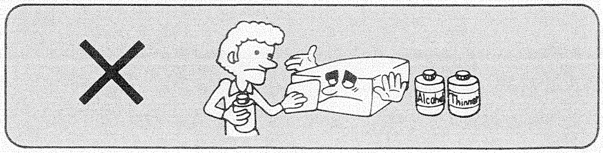
■ Avoid spray-type insecticides

Insecticides might cause cracks or "cloudiness" in the cabinet and plastic parts of this unit. The gas used in such sprays might, moreover, be ignited suddenly.



■ Never use alcohol or paint thinner

These and similar chemicals should never be used, because they may damage the finish.



■ If trouble occurs

If, during operation, the sound is interrupted or indicators no longer illuminate, or if abnormal odor or smoke is detected, immediately disconnect the power cord plug, and contact your dealer or an Authorized Service Center.

Connections

"CD" terminals

Connect a compact disc player.

"TAPE 1/DA TAPE" terminals

In addition to a tape deck, the audio from a digital audio processor or video cassette recorder (stereo type, audio only) can be connected here.
If such equipment is connected, connect the tape deck to the "TAPE 2/EXT" terminals.

"PHONO" terminals

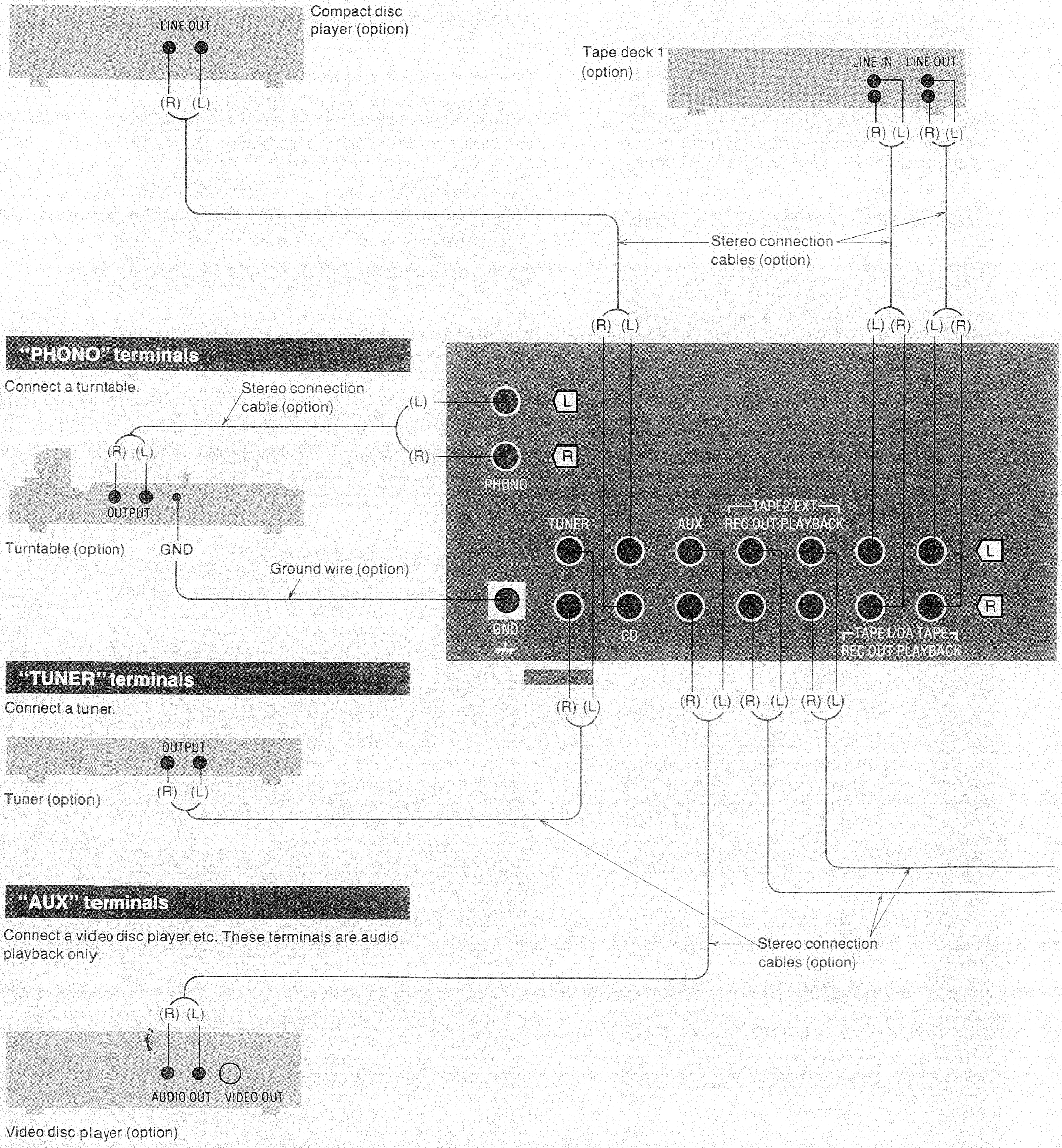
Connect a turntable.

"TUNER" terminals

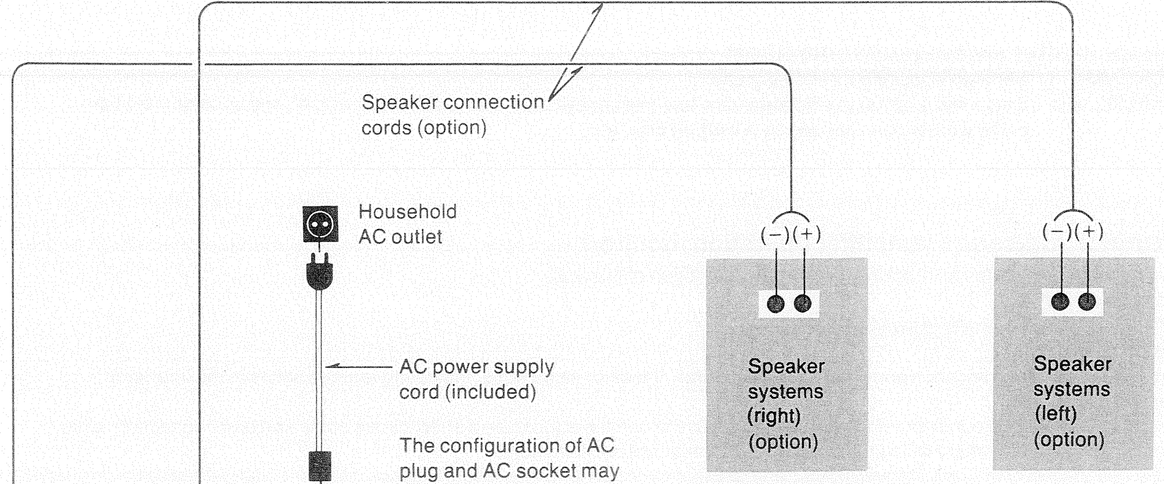
Connect a tuner.

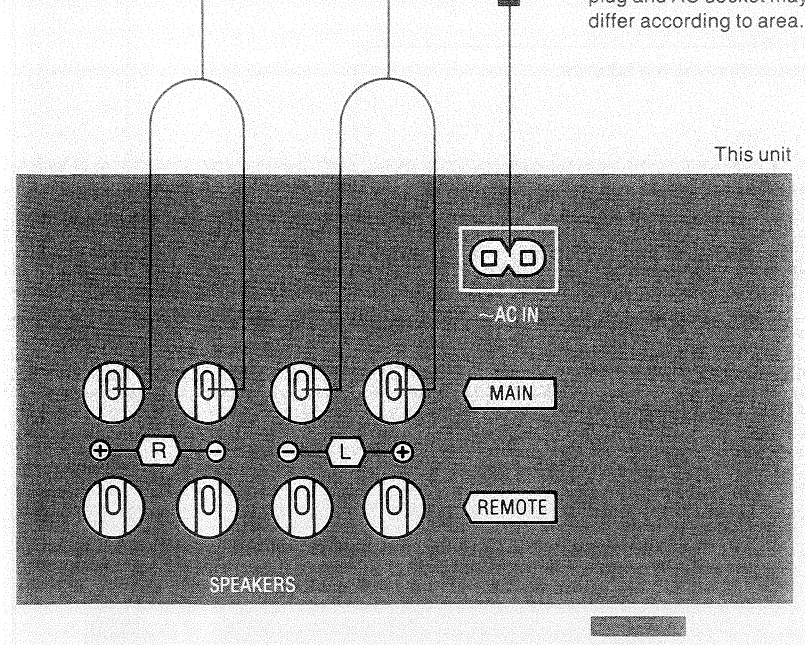
"AUX" terminals

Connect a video disc player etc. These terminals are audio playback only.



LINE OUT
(R) (L)
Compact disc player (option)
Tape deck 1 (option)
LINE IN
LINE OUT
(R) (L) (R) (L)
Stereo connection cables (option)
(R) (L)
(L) (R) (L) (R)
Stereo connection cable (option)
(L)
(R)
L
R
PHONO
(R) (L)
OUTPUT
Turntable (option)
GND
Ground wire (option)
TUNER
AUX
TAPE2/EXT
REC OUT PLAYBACK
GND
CD
TAPE1/DA TAPE
REC OUT PLAYBACK
(R) (L)
(R) (L) (R) (L) (R) (L)
OUTPUT
Tuner (option)
(R) (L)
Stereo connection cables (option)
(R) (L)
AUDIO OUT
VIDEO OUT
Video disc player (option)


Speaker connection cords (option)
Household AC outlet
AC power supply cord (included)
The configuration of AC plug and AC socket may differ according to area.
(−)(+)
Speaker systems (right) (option)
(−)(+)
Speaker systems (left) (option)


This unit
~AC IN
MAIN
R
L
REMOTE
SPEAKERS

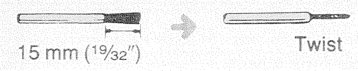
■ **Load impedance:**

MAIN and REMOTE : 8~16Ω
MAIN or REMOTE : 4~16Ω

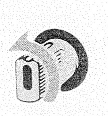
"SPEAKERS" terminals

■ Connection of speaker wires

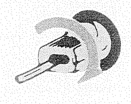
1. Strip off the outer covering, and twist the center conductor.


15 mm (19/32")
Twist

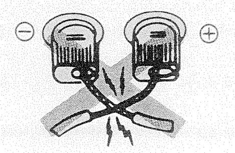
2. Turn completely to the left.



3. Insert wire and turn completely to the right. Pull wire to assure a proper connection.



Note:
To prevent damage to circuitry, never short-circuit plus (+) and minus (−) speaker terminals.

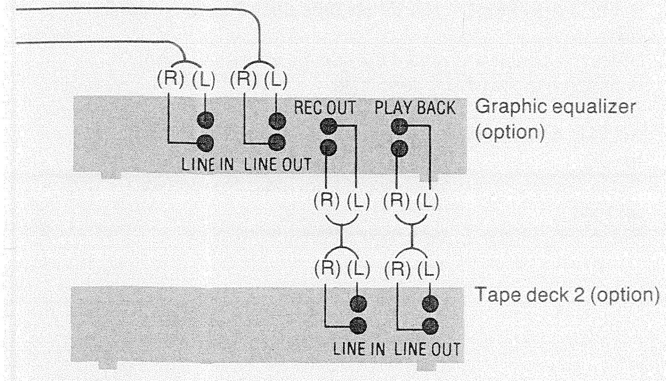


■ "REMOTE" terminals

Connection to second pair of speakers.

"TAPE 2/EXT" terminals

Connect a graphic equalizer or a second tape deck, etc.


(R) (L) (R) (L)
REC OUT
PLAY BACK
LINE IN
LINE OUT
Graphic equalizer (option)
(R) (L) (R) (L)
(R) (L) (R) (L)
Tape deck 2 (option)
LINE IN
LINE OUT

Front Panel Controls and Functions

●Subsonic filter switch (subsonic filter)

off (▄_█): Set to this position for ordinary use.

20 Hz (█_▄): Set to this position to eliminate ultra-low-frequency noise such as motor "rumble" and unusual vibration of the woofer cone caused by a warped disc, etc.

●Operation indicators (amplifier operation monitor)

This indicator illuminates to indicate the operating condition of this unit.

voltage control:
Illuminates when the power is switched "on".

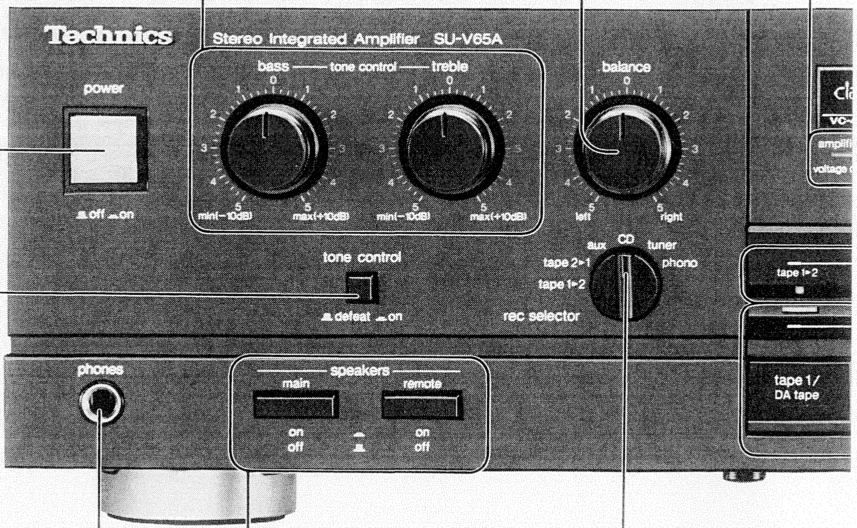
current drive:
Illuminates about four seconds after the "voltage control" indicator illuminates, indicating that the unit is in the operation condition.
If there is an abnormal condition of the output signals to the speakers (such as a short-circuit of the speaker connection wires, etc.), the protection circuitry will function and this indicator will not illuminate.

●Balance control (balance)

This control is used to adjust left/right volume balance.

●Tone controls (bass/treble)

The bass control is for the low-frequency sound range, and the treble control is for the high-frequency sound range.


Technics
Stereo Integrated Amplifier SU-V65A
power
off on
bass — tone control — treble
0 1 2 3 4 5
min(−10dB)
max(+10dB)
balance
left
right
tone control
defeat on
aux
CD
tuner
tape 2▸1
phono
tape 1▸2
rec selector
tape 1▸2
phones
speakers
main
remote
on
off
tape 1/
DA tape
amplifi
voltage

●Power switch (power)

Be sure to reduce the volume level to a low ("0→1") position before switching ON the power.

●Tone switch (tone)

This switch is used to switch the tone control circuit (bass, treble) ON or OFF.

defeat (▄_█):
Set to this position to turn the bass/treble tone control circuit off. Regardless of the positions of the bass/treble tone controls, the characteristics will remain flat.

on (█_▄):
Set to this position to adjust the tone quality by using the tone controls.

●Headphones jack (phones)

●Speaker selectors (speakers)

These selectors are used to switch the speaker systems ON and OFF.

main on (█_▄):
Sound can be heard from the speakers connected to the "MAIN" terminals.

remote on (█_▄):
Sound can be heard from the speakers connected to the "REMOTE" terminals.

●Recording output selector (rec selector)

This selector is used to select the signal to be recorded by the connected tape deck.

tape 1▶2:
Set to this position to record from tape deck 1 to tape deck 2.

tape 2▶1:
Set to this position to record from tape deck 2 to tape deck 1.

aux:
Set to this position to record the signals from equipment connected to the "AUX" terminals.

CD:
Set to this position to tape record from a compact disc.

tuner:
Set to this position to tape record from radio broadcasts.

phono:
Set to this position to tape record from phono discs.

Loudness switch (loudness)

Set to the "on" position when listening to music at a low volume. Auditory perception of sound in the low frequency range falls off at low volume, but when the switch is in this position, this deficiency is compensated for, so that the full impact of the musical performance can be enjoyed.

Phono cartridge selector (phono selector)

This selector should be set to the position which corresponds to the type of cartridge used on the turntable.

MM (▄ _ █):

Set to this position when using a moving-magnet type cartridge or high-output moving-coil cartridge (1 mV or more).

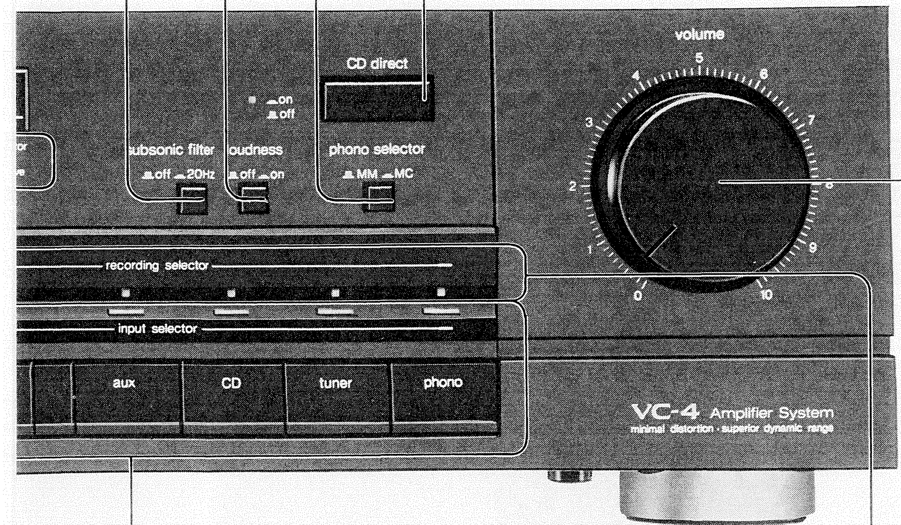
MC (█ _ ▄):

Set to this position when using a moving-coil type cartridge (less than 1 mV).

Direct-through select switch (CD direct)

Even better tone quality of the very high quality signals from a compact disc can be obtained by routing these signals directly to the volume level adjustment, without passing them through an input selector.

When this switch is set to the "on" position, the sound source cannot be switched by using the input selectors.



Volume control (volume)

This control is used to adjust the volume level.

Be absolutely sure to set this control to a low position ("0→1") before switching the power ON. After the power is switched ON, please wait several seconds before increasing the volume level.

Input selectors/indicators (input selector)

Press to select the sound source to be listened.

The corresponding indicator illuminates during operation to indicate the selected sound source.

tape 1/DA tape:

Press this button to playback or monitor the sound of a digital audio processor or other equipment connected to the "TAPE 1/DA TAPE" terminals on the rear panel.

tape 2/ext:

Press this button to play back or monitor the sound from a tape deck connected to the "TAPE 2/EXT" terminals on the rear panel.

aux:

Press this button to listen to sound from a video disc player or other equipment connected to the "AUX" terminals on the rear panel.

CD:

Press this button to listen to a compact disc.

tuner:

Press this button to listen to radio broadcasts.

phono:

Press this button to listen to phono discs.

Recording output indicators

These indicators indicate the program source which can be recorded.

Each indicator lights up corresponding with the selected position of the recording output selector.

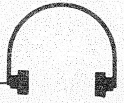
Operation

Standard operating procedures

1 "on" (▮_▬)

Be sure to reduce the volume level to a low ("0→1") position before switching ON the power.

2 Select the speaker systems to be used.



Headphones (option)
Plug type:
¼-inch phone plug,
stereo type

If sound from speakers is not wanted, set the speaker selectors to the "off" position.

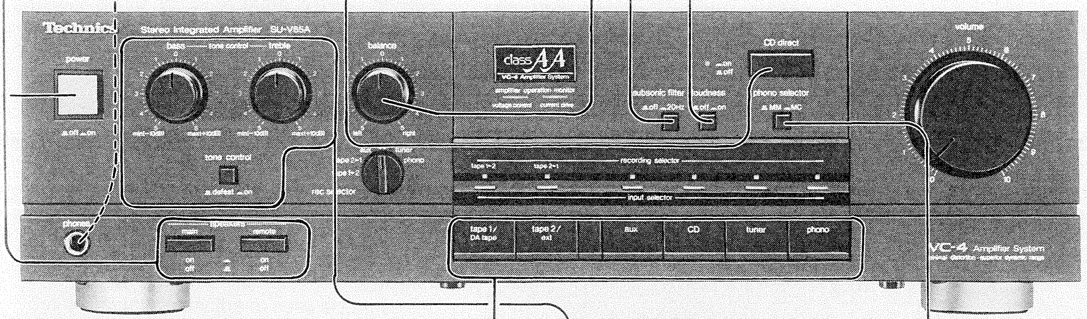
Note: Set volume control to the minimum ("0") position before connecting headphones.

3 "off" (▬_▮)

For direct compact disc listening, however, press in to "on" (▮_▬).

After disc play or radio broadcast, etc. has started

- Adjust left/right volume balance.
- Press inward to the "20 Hz" position to eliminate ultra-low-frequency noise (turntable motor "rumble", etc.).
- Press inward to the "on" position when listening to music at a low volume level (for compensation of the bass range).


Technics
Stereo Integrated Amplifier SU-V85A
power
off on
bass
tone control
treble
balance
left
right
class AA
VC-4 Amplifier System
amplifier operation monitor
voltage control
current drive
on
off
CD direct
subsonic filter
off 20Hz
loudness
off on
phono selector
MM MC
volume
tone control
defeat on
rec selector
recording selector
tape 1→2
tape 2→1
input selector
tape 1/ DA tape
tape 2/ ext
aux
CD
tuner
phono
phones
speakers
main
remote
on
off
VC-4 Amplifier System

4 Select the program source.

tape 1/DA tape:
Press this button to playback or monitor the sound of a digital audio processor or other equipment connected to the "TAPE 1/DA TAPE" terminals on the rear panel.

tape 2/ext:
Press this button to playback or monitor the sound from a tape deck connected to the "TAPE 2/EXT" terminals on the rear panel.

aux:
Press this button to listen to sound from a video disc player or other equipment connected to the "AUX" terminals on the rear panel.

CD:
Press this button to listen to a compact disc.

tuner:
Press this button to listen to radio broadcasts.

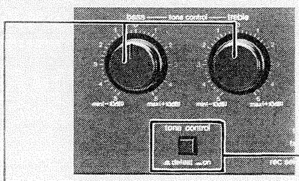
phono:
Press this button to listen to phono discs.

5 Operate each component.

(Refer to the operating instructions for the other equipment used.)

6 Adjust the volume level and the tone quality.

Adjust the tone quality as desired.


bass
tone control
treble
tone control
defeat on
rec

② **Adjust the tone quality.**

① "on"
If set to the "defeat" position, tone controls have no effect, and frequency response becomes flat.

Select either "MM" or "MC" when listening to phono discs.

Suggestions

- If noise is very annoying while listening to an FM or AM broadcast, switch OFF the video disc player, compact-disc player and turntable.
- Switch OFF the video disc player power if noise is excessive while listening to an audio tape, compact disc or regular phono disc.

After use

After listening is finished, power switches of all equipment should be switched OFF.

Recording

Note:
Tape deck 1 is the tape deck connected to the "TAPE 1/DA TAPE" terminals.

1 **"on" (▮▁▬)**
Be sure to reduce the volume level to a low ("0→1") position before switching ON the power.

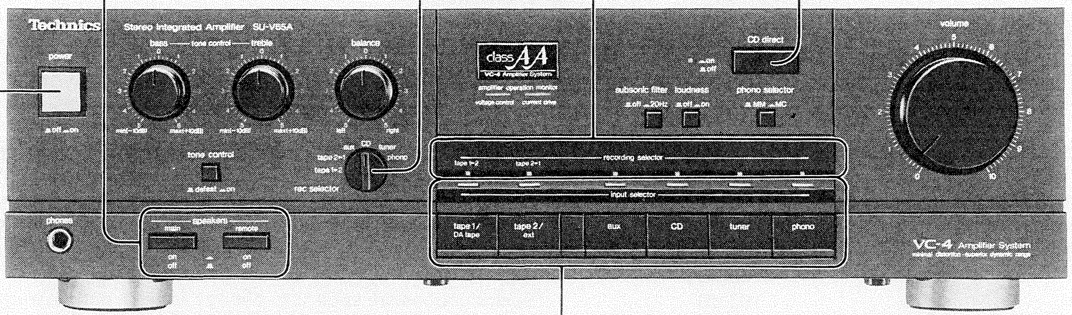
2 **Select the speaker systems to be used.**

3 **Select the desired program source for recording.**
(The recording output indicator will illuminate.)

Tape-to-tape recording
"Tape-to-tape recording" is recording from one tape to another while making some changes.
- **To record from tape deck 1 to 2;** Set to the "tape 1▶2" position.
- **To record from tape deck 2 to 1;** Set to the "tape 2▶1" position.

4 **"off" (▬▁▮)**
(See "Note".)

Recording output indicator


Technics
Stereo Integrated Amplifier SU-V65A
power
bass
tone control
treble
balance
tone control
defeat
rec selector
class AA
CD direct
subsonic filter
loudness
phono selector
recording selector
input selector
tape 1/ DA tape
tape 2/ ext
aux
CD
tuner
phono
volume
phones
speakers
main
remote
VC-4 Amplifier System

5 **Set to the position corresponding to the program source to be heard.**
(One of the input indicators will illuminate.)
- **If the program source being recorded is selected:** The sound going to the tape deck will be heard.
- **If the tape deck making the recording is selected (tape monitor):** The sound going through the tape deck will be heard.
- **If some other sound source is selected:** The sound of the selected source can be heard. (This will (This will not effect the recording which is being made.)

6 **Start the desired program source.**
Refer to the operating instructions for the optional equipment used.

7 **Begin recording.**
By using the controls on the tape deck, adjust the recording level. Then begin recording.

Note:
To record sounds from a compact disc, press the input selector marked "CD".
The compact-disc-direct switch is for listening only; it cannot be used to select the compact disc as a recording source.

To record a phono disc, an FM or an AM broadcast etc. while enjoying another program source

1. **Select the sound source for recording.**
2. **Start the play of the sound source.**
(Refer to the operating instructions for the optional equipment used.)
3. **Begin recording.**
(By using the controls on the tape deck, adjust the recording level. Then begin recording. Refer to the tape deck's instructions detailes.)
4. **Begin the other sound source.**

Technical Specifications

(DIN 45 500)

■ AMPLIFIER SECTION

20 Hz~20 kHz continuous power output	
both channels driven	2 × 85W (8Ω)
1 kHz continuous power output	
both channels driven	2 × 135W(4Ω)
Total harmonic distortion	
rated power at 20 Hz~20 kHz	0.002% (8Ω)
rated power at 1 kHz	0.005% (4Ω) 0.0009% (8Ω)
half power at 20 Hz~20 kHz	0.002% (8Ω)
half power at 1 kHz	0.002% (4Ω) 0.0008% (8Ω)
Intermodulation distortion	
rated power at 250 Hz: 8 kHz=4:1, 8Ω	0.005%
rated power at 60 Hz: 7 kHz=4:1, SMPTE, 8Ω	0.005%
Power bandwidth	
both channels driven, −3 dB	5 Hz~60 kHz (8Ω, 0.03%)
Residual hum and noise	0.8 mV
Damping factor	30 (4Ω), 60 (8Ω)
Input sensitivity and impedance	
PHONO MM	2.5 mV/47kΩ
MC	170 μV/220Ω
TUNER, CD, AUX, TAPE 1/DA TAPE	
TAPE 2/EXT	150 mV/22kΩ
PHONO maximum input voltage (1 kHz, RMS)	
MM	160 mV
MC	12 mV
S/N	
rated power (4Ω)	
PHONO MM	78 dB (86 dB, IHF, A)
MC	65 dB (68 dB, IHF, A)
TUNER, CD, AUX, TAPE 1/DA TAPE	
TAPE 2/EXT	92 dB (IHF, A: 100 dB)
−26 dB power (4Ω)	
PHONO MM	69 dB
MC	65 dB
TUNER, CD, AUX, TAPE 1/DA TAPE	
TAPE 2/EXT	70 dB
50 mW power (4Ω)	
PHONO MM	62 dB
MC	61 dB
TUNER, CD, AUX, TAPE 1/DA TAPE	
TAPE 2/EXT	63 dB
Frequency response	
PHONO	RIAA standard curve ±0.8 dB (30 Hz~15 kHz)
TUNER, CD, AUX, TAPE 1/DA TAPE	
TAPE 2/EXT	5 Hz~120 kHz (−3 dB) +0, −0,2 dB (20 Hz~20 kHz)
Tone controls	
BASS	50 Hz, +10 dB~−10 dB
TREBLE	20 kHz, +10 dB~−10 dB
Subsonic filter	20 Hz, −6 dB/oct.
Loudness control (volume at −30 dB)	50 Hz, +9 dB
Output voltage	
TAPE, 1, 2 REC OUT	150 mV
Channel balance, AUX 250 Hz~6,300 Hz	±1 dB
Channel separation, AUX 1 kHz	50 dB
Headphones output level and impedance	600 mV/330Ω
Load impedance	
MAIN or REMOTE	4Ω~16Ω
MAIN and REMOTE	8Ω~16Ω

■ GENERAL

Power consumption	620W
Power supply	
For United Kingdom and Australia	AC 50 Hz/60 Hz, 240V
For continental Europe	AC 50 Hz/60 Hz, 220V
For others	AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D)	430 × 126 × 340 mm (16-15/16" × 4-31/32" × 13-6/16")
Weight	9.1 kg (20.1 lb.)

Notes:

1. Specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Maintenance

To clean, use a soft dry cloth.
If the surfaces are extremely dirty, use a soft cloth, dipped into a soap and water solution or a weak detergent solution.
Wring the cloth well before wiping the unit.
Wipe once again with a soft dry cloth.
Never use alcohol, paint thinner, benzine, nor a chemically treated cloth to clean this unit.
Such chemicals may damage the finish of your unit.

Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is switched ON.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined below:

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

Troubleshooting Guide

Before requesting service for this unit, check this table to determine if the problem can be solved as described below. If the problem still persists after making these checks, or if there are symptoms of malfunction not described in this table, it is recommended that you consult the store where this unit was purchased or your local Service Center (see list included) for further information and assistance.

Problem	Probable cause(s)	Suggested remedy
During disc play		
The sound lacks clarity and volume.	The cartridge selector is incorrectly set to the "MM" position when a moving-coil type cartridge is being used.	• Set the cartridge selector to the "MC" position.
The high-frequency range cannot be clearly heard.	The cartridge selector is incorrectly set to the "MC" position when a moving-magnet type cartridge is being used.	• Set the cartridge selector to the "MM" position.
Problems noted at all times		
No sound is heard when the power is turned on.	The power cord plug is not completely inserted.	• Confirm that the power cord plug is connected completely.
	The power supply fuse has failed.	• Request the store where this unit was purchased, or a Service Center, to replace the fuse.
	Connections are incomplete or incorrect to the speaker systems, etc.	• Check to be sure that all connection wires are correctly connected.
	The setting of the input selectors has not been completely or correctly made.	• Check to be sure that the input selectors are set to the correct position.
	The speaker selectors are incorrectly set to the "off" position.	• Set to the "on" position.
When listening to stereo sound, the sound of the various musical instruments is not heard from its correct position.	The positive (+) and negative (−) connections of the speaker connection wires are reversed.	• Reconnect the speaker connection wires so that the positive and negative connections are correct.
When listening to stereo sound, the left and right sounds are reversed.	The left and right connections of the speaker connection wires are reversed.	• Check the speaker connection wires and connect them correctly if necessary.
	The left and right connections of the connection wires connected to other equipment are reversed.	• Check the connection wires to other equipment and connect them correctly if necessary.
A low-pitched noise ("hum" or "buzz") is heard.	The power cord or a fluorescent light, etc., is near the connection wires.	• Try separating this unit from the electric appliance as far as possible. • Reverse the connection of the power cord plug.
	The connection of the ground wire is incorrect or incomplete.	• Check to be sure that the grounding connection is correct. • If the unit is not grounded, try doing so.
Sound is not heard from the speaker system on one side.	The speaker connection wires are disconnected.	• Check and correct the connections of the speaker connection wires.
	The balance control is not set to the center position.	• Set the mark on the balance control to the center position.
Sound stops during a performance, or no sound is heard when the power is turned on.	The protection circuitry has functioned because the positive and negative speaker connection wires are "shorted" or speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.	• Turn off the power, and, after determining and correcting the cause, turn on the power once again.
No sound is heard from the source selected by an input selector.	The compact-disc-direct switch has not been switched "off".	• Switch it "off".